(I)

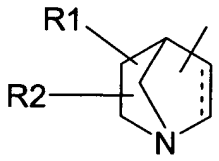
wherein

W is oxygen or sulphur;

A4 R is $-OR^4$, $-SR^4$, $-SOR^4$, $-SO_2R^4$, or R^4, wherein R^4 is propynyl substituted with phenyl, phenoxy or Y, wherein Y is a 5 or 6 membered heterocyclic group which is optionally substituted with one or more halogen(s), -OH, $-NO_2$, -CN, C_{1-4}-alkyl, C_{1-4}-alkylthio, C_{1-4}-alkoxy, $-SCF_3$, $-OCF_3$, $-CF_3$, $-CONH_2$, or $-CSNH_2$, and wherein the phenyl or phenoxy is optionally substituted with one or more halogen(s), -OH, $-NO_2$, -CN, C_{1-4}-alkyl, C_{1-4}-alkylthio, C_{1-4}-alkoxy, $-SCF_3$, $-OCF_3$, $-CF_3$, $-CONH_2$ or $-CSNH_2$;

r is 0, 1 or 2; and

G is an azabicyclic ring system which is:



(G)

wherein the thiadiazole ring is attached at any appropriate position;

R^1 and R^2 independently are hydrogen, -OH, =O, C_{1-15}-alkyl, C_{2-15}-alkenyl, C_{2-15}-alkynyl, C_{1-10}-alkoxy, and C_{1-5}-alkyl substituted with one or more halogen(s), -OH, $-COR^8$, $-CH_2OH$, $-NH_2$, carboxy and phenyl;

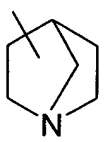
R^8 is hydrogen, or C_{1-6}-alkyl;

..... is a single or double bond;

or a pharmaceutically acceptable salt or solvate thereof.

26. (New) A compound of claim 25 wherein G is saturated.

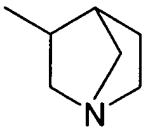
27. (New) A compound of claim 25 wherein G is



(G)

and wherein the -$(CH_2)_r$-W-thiadiazole is attached to the 3- or 4- position of G.

28. (New) A compound of claim 25 wherein G is



(G)

Cont A1

29. (New) A compound of claim 25 wherein r is 0.

30. (New) A compound of claim 25 wherein W is oxygen.

31. (New) A compound of claim 25 wherein R is $-OR^4$ or $-SR^4$, wherein R^4 is propynyl substituted with phenoxy, wherein the phenoxy is optionally substituted with halogen(s), -OH, $-NO_2$, -CN, C_{1-4}-alkyl, C_{1-4}-alkylthio, C_{1-4}-alkoxy, $-SCF_3$, $-OCF_3$, $-CF_3$, $-CONH_2$ or $-CSNH_2$.

32. (New) A compound of claim 25 wherein R is $-OR^4$ or $-SR^4$, wherein R^4 is propynyl substituted with phenyl or Y, wherein Y is thiophene, pyridine, furan or thiazole each of which is optionally substituted with halogen(s), -CN, C_{1-4}-alkoxy, CF_3 or -OCF3.

33. (New) A compound of claim 32 wherein R^4 is 2-propyn-1-yl.

34. (New) A compound of claim 25 which is:

Endo 3-(3-[3-(4-fluorophenyl)-2-propynyl-1-oxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-phenyl-2-propynyl-1-oxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(3-methoxyphenyl)-2-propynyl-1-oxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(4-chlorophenyl)-2-propynyl-1-oxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Cont A1

Endo 3-(3-(3-(3-trifluoromethylphenyl)-2-propynyl-1-oxy)-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-(3-pyridyl)-2-propyn-1-yloxy)-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-(2-pyridyl)-2-propyn-1-yloxy)-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-(3-(3-furyl)-2-propyn-1-yloxy)-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-(3-(3-fluorophenyl)-2-propyn-1-yloxy)-1.2.5-thiadiazol-4-yloxy-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(3-thienyl)-2-propyn-1-yloxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(2-thienyl)-2-propyn-1-yloxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(3-chlorophenyl)-2-propynyl-1-oxy)-1,2,5-thiadiazol-4-yloxy]-1-azabicyclo[2.2.1]heptane,

Endo 3-(3-[3-(3,5-difluorophenyl)-2-propynyl-1-oxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane, or

Cont A2

Endo 3-(3-[3-(2-thiazolyl)-2-propyn-1-yloxy]-1,2,5-thiadiazol-4-yloxy)-1-azabicyclo[2.2.1]heptane;

or a pharmaceutically acceptable salt or solvate thereof.

35. (New) A pharmaceutical composition comprising a compound of claim 25 together with one or more pharmaceutically acceptable carriers or diluents.

36. (New) The pharmaceutical composition of claim 35, wherein said dosage unit comprises from about 0.1 to about 100 mg of the compound.

37. (New) A method of treating a disease in the central nervous system caused by malfunctioning of the muscarinic cholinergic system comprising administering to a subject in need thereof a pharmaceutically effective amount of a compound of claim 25.

Response

Claims 1-24 have been cancelled without prejudice or disclaimer. Claims 25-37 have been added and therefore are pending in the present application. Claims 25-37 are based on the original claims.

I. Rejection of Claims 1-9, 12-24 under 35 U.S.C. 102(e)

Claims 1-9, 12-24 stand rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No. 5,821,371 (Alt *et al.*). Claims 1-24 have been cancelled. The rejection is thereby rendered moot.

II. Rejection of Claims 10 and 11 under 35 U.S.C. 103(a)

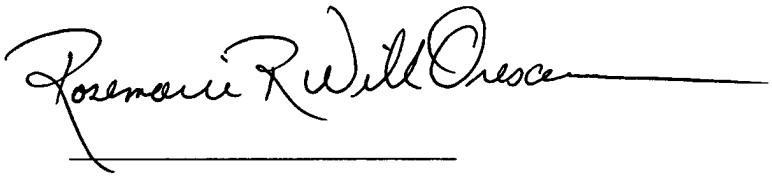
Claims 10 and 11 stand rejected under 35 U.S.C. 103(a) as being obvious in view of US Patent No. 5,821,371 (Alt *et. al*). Claims 10 and 11 have been cancelled. This rejection is thereby rendered moot.

III. Rejection of Claims 20, 22 and 24 under35 U.S.C. 112, second paragraph

Claims 20, 22 and 24 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 20, 22 and 24 have been cancelled. This rejection is thereby rendered moot.

Applicant submits the present amendment presents no new issues or new matter. Reconsideration of the application in view of the above amendments and remarks is respectfully requested. In view of the above, Applicant submits all claims are in condition for allowance. Early action to that end is respectfully requested. The Examiner is hereby invited to contact the undersigned by telephone if there are any questions concerning this amendment or application.

Respectfully submitted,



Date: October 31, 2002

Rosemarie R. Wilk-Orescan
Registration Number 45, 220
Novo Nordisk Pharmaceuticals, Inc.
100 College Road West
Princeton, NJ 08540
(609) 987-5969